

FEMP 25

Renewable Energy Technology Applications Wind Energy Technology

Wind energy technologies can help Federal sites meet agency goals and legislative mandates, improve energy security, and reduce environmental impact while efficiently providing electricity, heating, cooling, and other applications.

The course covers sourcing and selecting cost-effective wind energy technologies and common implementation considerations.

By taking this course, learners will be able to:

- Understand geographic/climate considerations wind energy technology capabilities and constraints, and evaluation of various technology options.
- Select the best wind energy technologies for building and site needs, considering the latest best practices and technical considerations.
- Understand different scales of turbine installations, types of towers, siting turbines, and calculating power from speed and height ratios.
- Assess factors to integrate wind energy into larger energy systems.

Instructor

The instructor for this series is Andy Walker, PhD, Principal Engineer at the National Renewable Energy Laboratory. At NREL, Dr. Walker conducts engineering and economic analysis of renewable energy projects for FEMP and other non-governmental clients. Dr. Walker is an instructor and has authored more than 28 book chapters, journal articles, and papers. He holds a bachelor's of science degree, a master's of science degree, and a doctorate degree in mechanical engineering from Colorado State University and is a registered Professional Engineer in the State of Colorado.